## NATIONAL GUARD REGULATION

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC 20310, 31 March 1982

No. 105-17

# Communications-Electronics

## NONTACTICAL TELECOMMUNICATIONS FACILITIES

This NGR prescribes policy and administrative instructions for nontactical record communications facilities and services operated and/or used by elements of the Army National Guard.

Interim changes are not official unless authenticated by the Executive, NGB. Interim changes will be destroyed on their expiration dates unless sooner superseded or rescinded.

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### CHAPTER 1

### INTRODUCTION

- 1-1. Purpose. This regulation prescribes policy and administrative instructions for nontactical telecommunications centers (TCCs) operated by the Army National Guard and other nontactical record communications transmission facilities to include commercial teletype equipment and services within the Army National Guard.
- Applicability. These policies are applicable to ARNG elements operating nontactical TCCs and other nontactical record communications transmission facilities within the Army National Guard connected either directly or indirectly to the Automatic Digital Network (AUTODIN). The term "telecommunications center" as used here includes those ARNG remote terminals that benefit from one or more TCC functions being performed by an automated telecommunications (ATCC). automated multimedia center exchange (AMME), local digital message exchange (LDMX), or equivalent system. ARNG remote terminal personnel are responsible for the performance of all TCC functions, except those performed by the ATCC.
- 1-3. Definitions: a. AUTODIN. The DOD worldwide Automatic Digital Record/Data Communications Network. AUTODIN is the principal long haul DOD digital network for transmitting administrative, logistical, special category, intelligence, and command and control narrative and data traffic on an automated switching basis between switching centers and among a wide variety of fixed, transportable, and mobile subscriber equipments such as teletypwriters, teleprinters, paper tape machine, punched card machines, magnetic tape terminals, local digital message exchanges, and computers.
- b. Automated Telecommunications Center (ATCC). A telecommunications center wherein message processing and/or terminal functions are automated.
- c. Commercial refile. A service provided by DOD to process messages to destinations not served by the Defense Communications System (DCS-AUTODIN).
- d. Communications terminal. A communication facility consisting of input/output devices, associated processors, and other auxiliary equipment necessary for the transmission and receipt of messages through the AUTODIN. The terminal may include

- communications security (COMSEC) equipment.
- e. FAXGRAM. A service (nonsubscriber to nonsubscriber) wherein messages are transmitted to GRAPHNET via TELEX or TWX for delivery as FAXGRAMS. Processing and delivery of FAXGRAMS are similar to methods used for full-rate and overnight telegram.
- f. GRAPHNET. A means of transmitting alphanumeric information from teletypewriter terminals to facsimile devices.
- g. Message processing. Message processing includes those functions necessary to accept, service, queue, tape, encrypt, send, receive, decrypt, log, route, reproduce, deliver, and file messages.
- h. Public message service. (Nonsubscriber to nonsubscriber) consists of:
- (1) Full-rate telegram, where a message is transmitted via Western Union facilities and delivered by commercial carrier, unless telephone delivery is authorized followed by a confirmation copy by mail. This service is the most expensive method available.
- (2) Overnight telegram, processed in the same manner as full-rate telegram except that the message is held overnight for delivery at the beginning of business the following day.
- i. Record communications. Narrative, card, and magnetic tape messages and facsimile transmissions.
- j. Remote terminal. A device connected as a subscriber and user to an automated multimedia exchange (AMME) or equivalent ATCC for access to the AUTODIN and for performance of certain TCC functions such as plain language address (PLA) to routing indicator (RI) conversion, message storage and retrieval, message sequencing, accountability, history, and statistics. Remote terminals include interim remote terminals (IRT) and modular automated remote terminals (MART).
- k. Reverse (commercial) refile. A process wherein messages are originated using commercial teletype facilities for introduction into the DCS (AUTODIN) for delivery to destinations served by AUTODIN.
- I. Telecommunications Center (TCC). A facility that integrates communications terminal and message processing functions in a single entity and is responsible

for transmission, receipt, acceptance, processing, and limited distribution of incoming and outgoing messages.

m. TELEX. A direct dial (subscriber to subscriber) teletypewriter to teletypewriter exchange service used by the subscriber to transmit/receive narrative mes-

sages at 66 words per minute.

- n. TEL (L) EX. A service (subscriber to nonsubscriber) wherein a message is sent directly by the subscriber via TELEX to the Western Union telegraph office at the addressee's destination.
- o. TWX. A service identical to TELEX, except at 100 words per minute.

### **CHAPTER 2**

### TELECOMMUNICATIONS CENTERS

- 2-1. General: a. Communications is a responsibility of command. Command and control are exercised through communications to provide direction necessary for operational, logistic, and administrative functions. As such, communications allotted to a commander to accomplish his mission are to be under his direct control and an integral part of his command system.
- b. ARNG nontactical TCCs provide for transmission and receipted of time sensitive record communications in support of the commander to which they are assigned. Procedures for administration and operation of ARNG TCCs are contained here and in other Department of Defense (DOD) and Army publications made applicable by the Chief, National Guard Bureau in accordance with AR 130-5.
- c. In terms of the AUTODIN as an operating system, emphasis is placed on complete integration of all functional elements such as transmission, receipt, switching, security, terminal operations, message processing, and distribution. Record communications may involve the use of automation but are not part of data and statistical processing. Communications terminals are entry and exit points to and from the AUTODIN normally collocated with the message center as a TCC. TCC message distribution will be limited to over-the-counter delivery.
- d. Over-the-counter service will be provided to DOD and other agencies authorized access to the AUTODIN located within the local geographical area consistent with the TCC's capability to provide such support. Such support will insure the maximum use of existing communications resources furthering communications economy (AR 105-10).
- 2-2. Operating Procedures. a. Standard operating procedures for TCCs and communications terminals will be as prescribed in AR 105-17 using TM 11-490-2, Army Communications Facilities-Telecommunications Center Operating Procedures. Any exceptions and/or deviations to prescribed procedures absolutely necessary to satisfy local requirements will be submitted to NGB-ARL-T, Washington, DC 20310 for review and approval prior to implementation.
- b. Policies, responsibilities, and procedures for obtaining, operating, and controlling the use of nontactical facsimile

(telecopier) equipment are contained in NGB Pamphlet 105-2.

- 2-3. Administrative control and supervision. The TCC is normally under the supervision and control of the staff communications officer, responsive directly to the commander (Adjutant General). In those instances where a TCC is provided to support an office of the United States Property and Fiscal Officer (USPFO) not collocated with the State head-quarters, the TCC will be directly supervised by the USPFO or designated representative.
- 2-4. Technical control. Technical control will be provided by the Defense Communication System station or ATC to which the ARNG TCC or terminal is connected. The DCS station or ATCC will normally be designated net control station.
- 2-5. Terminal locations. The TCC must be located in or near the major headquarters or agency for which provided. TCCs serving data processing installations (DPI) should be in close proximity to and preferably adjoin the agency performing the data processing function. Dedicated data communications terminals without a TCC function should be included within the DPI.
- Operating Schedules. TCCs not operating 24 hours a day will satisfy requirements of JANAP 128 for part-time tributary station operation. TCCs will not arbitrarily reduce operating hours or assume unattended status. Adequate trained personnel will be made available to maintain established operating Requests for curtailment or schedules. change of operating hours will be submitted to NGB-ARL-T and to the net control station in accordance with JANAP 128. The name and telephone number of the individual or designated representative who will be available during nonduty hours to open the terminal or otherwise provide for the disposition of high precedence traffic will be provided to the net control station and NGB-ARL-T.
- 2-7. TCC configuration. The configuration of the TCC is based on mission requirements validated by the National Guard Bureau. The procedures in AR 105-26 apply for determining the type and size of terminal equip-

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ment required, and AR 105-22 applies for processing TCC equipment requirements.

- 2-8. Personnel assignment. a. TCC personnel will be included within the State head-quarters TDA. It is critical that telecommunications personnel maintain established operating schedules in order to satisfy time sensitive command and control, and operational, logistical, and administrative communications requirements. They must be available to insure that continuity of operations is maintained during and following mobilization. TCC personnel will be assigned to the State Area Control (STARC) upon mobilization.
- b. MTDA positions must be in a compatible officer, warrant officer, or enlisted military occupational specialty (MOS).
- 2-9. Personnel qualification: a. Full-time TCC personnel must meet minimum requirements prescribed by GS qualification schedules and have a validated security clearance commensurate with traffic being processed. MOS qualification must be accomplished within 6 months of assignment.
  - b. Backup personnel must have a

validated security clearance commensurate with traffic being processed in the TCC, and be sufficiently proficient in equipment operation and message processing as determined by the TCC supervisor to satisfy operational requirements in the absence of full-time personnel.

- 2-10. Publications. Publications necessary for proper ARNG TCC operation are listed in appendix A. AR 310-20 prescribes policy, responsibilities, and procedures for control, release, and distribution of Allied Communications Publications (ACP) and Joint Army Navy Air Force Publications (JANAP). Defense Communications Agency publications are to be obtained from the Director, Defense Communications Agency, ATTN: Code 211, Washington, DC 20305.
- 2-11. Files and records. Files and records of the TCC will be kept to the minimum necessary for TCC mission accomplishment, and normally will be restricted to those required by AR 340-18-11 and TM 11-490-2. The TCC will not perform long-term maintenance and administration of message files and other correspondence not related to the TCC.

### CHAPTER 3

## COMMERCIAL TELETYPE SERVICES

- General: a. Transmission of official 3-1. messages via commercial means is authorized only in those cases where military TCC facilities are not available, or when specifically authorized by the CNGB. In accordance with AR 105-23, DA messages must be filed for transmission via military TCCs (AUTODIN) to the maximum extent possible. Arrangements must be made with the nearest military TCC to obtain service for both message transmission and receipt in accordance with paragraph 1-14(d), AR 105-31. Arrangements include customer copy requirements, telephone contact for delivery of high precedence traffic, and after duty hours delivery procedure.
- b. Authorization for in-house leased TELEX/TWX equipment will be considered by the CNGB on a case-by-case basis only for those Federal activities requiring immediate receipt of safety-related traffic (such as Army aviation activities), and/or whose Federal mission requires access to AUTODIN, which cannot be provided by over-the-counter service from a military TCC.
- c. TELEX/TWX equipment (where authorized) is used primarily to receive traffic. Originating message traffic must be filed for transmission through the (nearest) supporting military TCC, unless the time required for local travel and message urgency would seriously impair mission accomplishment. (A support agreement with the military TCC for this service is also required IAW para 1-14(d), AR 105-31.
- d. Cost for messages originated via in-house leased teletype equipment is billed to the local subscriber's TELEX/TWX access line. Each activity operating leased TELEX/TWX equipment must establish and maintain an administrative system that identifies incremental costs incurred as a result of both Federal and State missions. Only those costs directly attributable to official Federal ARNG business is chargeable to BP3737.
- e. When using commercial teletype services, the most economical means of service available will be used to satisfy mission requirement.
- 3-2. Procedures: a. Messages filed for transmission via military TCCs addressed to CONUS activities by commercial teletype facilities and vice versa are routed through

- the DOD consolidated Commercial Refile Center, Albany ASC, GA. Agencies that provide commercial refile services for non-CONUS ARNG activities are NAVCOMSTA, Pearl Harbor for Hawaii; Elmendorf AFB for Alaska; and NAVCOMSTA, Roosevelt Roads for Puerto Rico and the Virgin Islands.
- b. Messages transmitted between two CONUS activities served by TELEX/TWX should use direct dial-up procedures to pass traffic. This traffic should not be routed through the DOD Commercial Refile Center.
- c. Messages transmitted via commercial teletype services must be single addressee or book messages, unless more extensive distribution and/or knowledge of addressees is absolutely essential.
- d. Only unclassified messages may be transmitted via commercial teletype facilities, except when an off-line encryption process is used.
- e. A log of all messages transmitted and received via TELEX/TWX must be maintained by the subscribing activity. Logs should identify message orginator, addressee, and time of transmission/receipt.
- 3-3. Requests for leased commercial teletype equipment: a. Requests for leased TELEX/TWX must be submitted through or initiated by the USPFO. The USPFO will complete an economic analysis IAW AR 11-28. Each request should include:
- (1) Requirement and justification for TELEX/TWX service within the parameters of paragraph 3-1.
- (2) Name, address, and telephone number of requesting activity.
- (3) Current traffic averages, transmission means, and associated cost.
- (4) Costs for service requested to include estimate of incremental usage cost per month.
- b. Requests along with economic analysis must be forwarded to NGB-ARL-T for consideration.
- c. NGB-ARL-T will return all requests to the USPFO, who will forward approved requests to the U.S. Army Communications Command area CE office for communications service authorization (CSA) preparation.
- d. Source of funding for leased commercial teletype equipment supporting Fed-

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eral missions/requirements is BP 3737.

3-4. Routing information. Each activity served by in-house commercial teletype is responsible for insuring that their routing information is current and correctly listed in the following publications:

a. DOD Plain Language Address (ACP 117 CAN-US SUPP 1 (I)): This publication is the DOD official routing guide for all military organizations. Activities must notify the supporting refile station of new TELEX/TWX installations, terminations, and/or changes to geographic location, PLA, TELEX/TWX number, or answer back code for inclusion/deletion to this publication.

b. TWX/TELEX Directory (ACP 117 US SUPP-5 (Z)): This publication lists all military operated TELEX/TWX machines.

Changes as specified in a above, new installations, and/or terminations must be submitted to the Defense Communication Agency, ATTN: Code 533, Washington, DC 20305. Appendix B is an extract from ACP 117 US SUPP-5 (Z), which provides format and preparation instructions for submitting changes, additions, and/or deletions to the TWX/TELEX directory.

- **3-5.** Review and revalidation. The USPFO must review all in-house leased TELEX/TWX services annually to:
- a. Eliminate nonessential services and insure activities with leased TELEX/TWX qualify for this service IAW paragraph 3-1 above.
- b. Identify and eliminate unnecessary incremental usage costs.

# APPENDIX A

# TELECOMMUNICATIONS RELATED PUBLICATIONS

ARMY REGULATIONS		ALLIED COMMUNICATIONS PUBLICATIONS		
AR 11-28				
AR 18-3	JOINT PUBLICATIONS	(R) ACP 117		
AR 105-1	**JANAP 128 (H)	ACP 117 US SUPP-1 (I)		
		ACP 117 US SUPP-5 (Z)		
**AR 105-10	(C) JANAP 201	**ACP 117 CAN-US SUPP-1		
** AR 105-17	TECHNICAL MANUALS	**ACP 121		
AR 105-22	**TM 11-490-2	**(C) ACP 121 US SUPP-1		
AR 105-23		**(C) ACP 122		
AR 105-26		(C) ACP 122 US SUPP-1		
**AR 105-31		ACP 126		
**AR 105-32		(R) ACP 127		
**AR 105-34		**ACP 131		
AR 190-13		**ACP 131 US SUPP-1		
AR 310-20	TECHNICAL BULLETINS ACP 167			
AR 310-50				
	*(C) TB 380-41	DCA CIRCULARS & NOTICES		
**AR 310-75		DCAN 210-0-1		
AR 340-3		DCAC 210-20-1		
**AR 340-5 **AR 340-16		DCAC 310-D70-30 DCAC 370-D95-1		
AR 340-18-11		DCAC 310-D70-30		
	FIELD MANUALS	DCAC 370-D95-1		
AR 380-20	FM 11-490-6			
**AR 380-26				
*(FOUO) AR 380-40	DOD REGULATIONS			
*(C) AR 530-2	DODISPR 5200.1-R			

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\*(C) AR 530-4

DA PAM 310-1

DA PAM 310-2

DA PAM 310-3

\*(C) DA PAM 310-9

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NG PAMPHLET

\*NGR 750-3

NGB PAM 105-2

# NOTES:

<sup>\*</sup>Required only when configured for secure operation. Additional cryptographic publications related to the cryptographic system in use will be required.

<sup>\*\*</sup>Mandatory reading upon assignment and semiannually. See TM 11-490-2 for additional instructions.

#### APPENDIX B

# Extract from ACP 117 US SUPP-5 (Z)

# Request for Changes to Publications

- 1. Changes, additions, or deletions to the listings in this publication shall be submitted as they occur, direct from the using organization to the Defense Communications Agency, ATTN: Code 533, Washington, DC 20305. Printed changes to the publications will be issued semiannually on 1 February and 1 August. Revisions will be issued in accordance with the provisions of ACP 198(G).
- 2. Changes to listing of commercially leased TWX facilities require coordination with the commercial company effecting the installation. Such changes must be coordinated locally by the using organization. An indication of the coordination effected will be shown on the request forwarded to the Defense Communications Agency. Failure to indicate same may result in delay of promulgation of information within this publication.
- 3. Request for corrections will be submitted in a standard format as prescribed below:
  - a. Corrections will be listed sequentially as they appear in the book.
  - b. All corrections will show page number.
- c. Action to be taken will be indicated by using the symbols: A for add, C for change, and D for delete.
- d. Where necessary to specify the column being corrected, the word "column" will be abbreviated and followed by the number of the column affected; e.g., COL 1, COL 2, . . .
- e. When corrections are to be made which will result in a listing being moved from one page to another in order to maintain alphabetical/numerical sequence, the current listing will be deleted and the corrected listing will be added on the appropriate page.
- f. Under location column, list the specific locations of the user. Military installations should be identified in lieu of cities where applicable. DO NOT attempt to associate the location of the user with that of the local company through which the TWX/TELEX installation was obtained. The purpose of the listing is to identify the location of the military user.
- g. Under user column, list the desired identification of the user(s). DO NOT attempt to identify the authorizing command or headquarters as the user, unless the TWX/TELEX number assigned actually serves or is assigned to such command or headquarters. Where the TWX/TELEX number serves all addressees of the service, agency, or bureau at that location the term COMMCEN should be listed in lieu of individual listing of activities involved.

### h. Corrections:

(1) Deletions—Deletion of an entry, which includes all columns pertaining thereto will be accomplished as illustrated in the first example shown below. Deletion of location and all entries associated therewith will be accomplished as illustrated in the second example shown below:

## Examples:

31 D NEW ORLEANS LA 151 FTR GP ENTRY

42 D YORKTOWN VA LOCATIONS AND ENTRY (S)

(2) Additions—Additions of a new user will be accomplished as illustrated in the example shown below.

Examples:

7 A BURLINGTON IA COL3 IOWA ARMY AMMO PLANT COL4 A COL5 901 525-1142 COL6 ASTERISK COL7 USAAMO BURL

(3) Changes—Changes to a column 3 entry will be accomplished as illustrated in the first example shown below. Changes to columns 4 through 7 will be accomplished as illustrated in the second example shown below:

Examples:

6 C AUGUSTA ME COL3 ADJ GEN CP KEYES TO READ TAG

MAINE

35 C PHILADELPHIA PA NAV AVN SUP DEP COL5 710 670-0174

COL 7 DISC PA

Users are invited to send comments and/or suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to NGB-ARL-T, Washington, DC 20310.

By Order of the Secretary of the Army:

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